

**The University of Saskatchewan
Department of Computer Science**

Tuesday, October 29, 1996

Computer Science 470/816

Midterm Exam

This exam has 40 marks worth of questions and you have 80 minutes to do them. Pace yourself accordingly. The questions build on each other, so it is best if you read all the test before starting to answer any of it. Answer all questions in a single answer booklet.

CASE STUDY: *The Information Experience*

There is a store in a major city that's called *The Information Experience* and that's known to its regular customers as TIE. TIE is a rather large store that serves a variety of customers. Some people think of TIE as a book store that sells more than books, some people think of it as a music store that sells more than recordings and sheet music, and some people think of it as just a nice place to hang out. TIE sells "information" on all kinds of media: books & magazines; records, tapes, & CD's; select software packages; and even art posters and prints. It also has a coffee shop where customers can browse through items before purchasing or just meet and discuss their interests with each other. At one end is a small stage area where writers and musicians can perform their works for the customers. Most important of all TIE has a friendly and knowledgeable staff who share their love of information (in all its forms) with the customers. TIE has many loyal customers from all around North America who visit it whenever they are in town. Many of them have encouraged TIE to develop a virtual TIE on the Web.

Question 1 (10 marks) Tasks

Identify and briefly describe at least 10 significantly different tasks that an TIE Web site should assist customers with. Make your tasks specific but DO NOT repeat tasks with just a change of product description [such as: buy books, and buy records].

Question 2 (10 marks) Users

- a) Identify and briefly describe at least 5 significant different User groups that TIE should serve.
- b) Use a table to identify which Tasks (identified in question 1) are likely to be most important to each User group. Note: there should be differences. Provide additional explanation of the reasons for these differences.

Question 3 (10 marks) Content

Use a table to:

- a) identify at least ten different types of **content** required for the Tasks identified in question 1,
- b) identify the **tasks** that each type of content is used for
- c) evaluate the content both in terms of **importance** {essential or nice to have}
- d) evaluate the content in terms of **availability** {needs to be provided by the site or probably can be provided by a link to some other site (specify what kind of site)}.

(1 mark for each complete discussion of a type of content)

Question 4 (10 marks) Systems, Applications, Objects, and the Web

- a) Briefly describe (include a brief example as part of this description) how a "systems" approach might be applied to the development of a Web site for TIE. (2 marks)
- b) Briefly describe (include a brief example as part of this description) how an "applications" approach might be applied to the development of a Web site for TIE. (2 marks)
- c) Briefly describe (include a brief example as part of this description) how a "systems" approach might be applied to the development of a Web site for TIE. (2 marks)
- d) Discuss four needs of a good Web site for TIE that would not be investigated by any of the three approaches discussed in other parts of this question. (4 marks)

Bonus Question: (2 marks) Provide a better definition of "application" than that given in the class notes along with a reference to the source of the definition.

providing something functional on web